



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,262	11/26/2001	John W. Baker	100.362US01	1327

27073 7590 01/17/2003

LEFFERT JAY & POLGLAZE, P.A.
P.O. BOX 581009
MINNEAPOLIS, MN 55458-1009

EXAMINER

VU, PHUONG T

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/995,262

Applicant(s)

BAKER, JOHN W.

Examiner

Phuong T. Vu

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15, 20, 21 and 25-28 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 16, 17, 19, 22-24 and 29-38 is/are rejected.
- 7) ☒ Claim(s) 7-8, 10-11, 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16, 19, 22-24, 31-33, 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claims 16, 19, 22-24, it is unclear what comprises the recited "housing containing a non-redundant cable modem termination system", making the claims indefinite. Because the elements that are provided in the non-redundant cable modem termination system are omitted, there is no support in the claims for the presence of such system. The claims should clearly indicate what components are present in said system to make it a non-redundant cable modem termination system.

Regarding claims 31, 33, it appears that the claimed primary module would be a separate and different module from the electronic modules, however, from the examiner's understanding of the present invention, the primary modules are selected from the electronic modules. This makes the claim language conflicting and indefinite.

Claim 32 is indefinite as the terminology regarding the cards is unclear. What is Applicant designating as the primary, secondary, redundant primary or failed primary cards?

Regarding claim 36, the claim language that one of the electronic modules operating in a non-redundant configuration is designated as a redundant module is

conflicting. Furthermore, the language renders an incorrect description of the present invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-4, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Albert et al. (US 5,006,951). Regarding claim 1, the reference discloses an adaptive module 10 comprising a backplane (not shown but inherently present), a card cage 36 attachable to the housing, an active first electronic module (first of two boards 48) disposed within the card cage and electrically connected to the backplane, the active first electronic module electrically connectable to an active second electronic module (first of two boards 52) disposed within the housing for communicating with the active second electronic module, a backup first electronic module (second of two boards 48) disposed within the card cage and electrically connected to the backplane, the backup first electronic module electrically connectable to a backup second electronic module (second of two boards 52) disposed within the housing for communicating with the

backup second module when there is a failure within the active second electronic module and a switch/relay 58 disposed within the card cage and electrically connected to the backplane, the switch/relay adapted to enable communications between the active first electronic module and the backup second electronic module when there is a failure within the active second electronic module.

Regarding claim 2, the active first electronic module comprises a plurality of connectors 110, which mate with the backplane. The active first module is an optical transmitter/receiver and therefore would be connectable to remote equipment.

Regarding claim 3, the switch/relay comprises a plurality of circuit boards.

Regarding claim 4, the backplane is attachable to a housing.

Regarding claim 17, the active and backup first electronic modules are received in first slots within the card cage and circuit boards of the switch/relay are received in second slots of the card cage.

6. Claims 1-2, 4-6, 9, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Bagley (US 5,991,852). Regarding claim 1, the reference discloses an adaptive module 10 comprising a backplane (provided on boards 102, 109), a card cage 140 attachable to a housing, an active first electronic module (disk drive assembly in a row connected to J3 on board 109) disposed within the card cage and electrically connected to the backplane, the active first electronic module electrically connectable to an active second electronic module (adjacent to first electronic module) disposed within the housing for communicating with the active second electronic module, a backup first electronic module (disk drive assembly in a row connected to J3 on board 102)

Art Unit: 2841

disposed within the card cage and electrically connected to the backplane, the backup first

electronic module electrically connectable to a backup second electronic module disposed within the housing for communicating with the backup second module when there is a failure within the active second electronic module and a switch/relay 48, 46 disposed within the card cage and electrically connected to the backplane, the switch/relay adapted to enable communications between the active first electronic module and the backup second electronic module. Regarding the function language in the claim, it has been held that the recitation that an element is "adapted to" or "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Regarding claim 2, the active first electronic module comprises a plurality of connectors, which mate with the backplane. The active first module is a disk drive and is connectable to remote equipment.

Regarding claim 4, the backplane is attachable to a housing.

Regarding claim 5, the backplane is disposed in the card cage.

Regarding claim 6, the reference discloses a housing 140 for an electronic system comprising a first module (right side of chassis which is divided by the boards 102 and 109), a first backplane (provided on board 109) disposed within the first module, first and second electronic modules (two adjacent disk drive assemblies in a row connected to J3 on board 109) disposed within first module, each of the first and second electronic modules electrically connected to the first backplane, a second

module (left side of chassis) electrically attached to the first module, the second module comprising a second backplane (provided on board 102), a third electronic module (disk drive assembly in a row connected to J3 on board 102) disposed within the second module, the third electronic module electrically connected to the first electronic module and to the second backplane, a fourth electronic module (adjacent third electronic module) disposed within the second module, the fourth electronic module electrically connected to the second electronic module and to the second backplane and a switch/relay 48,46 disposed within the second module and connected to the second backplane, the switch/relay adapted to selectively permit communication between the third electronic module and the second electronic module when there is a failure within the first electronic module.

Regarding claim 9, the third electronic module comprises a plurality of connectors connectable to remote equipment.

Regarding claim 19, the housing may be used as a housing for a non-redundant cable modem termination system.

7. Claims 29-36, 38 is rejected under 35 U.S.C. 102(e) as being anticipated by Cloonan et al. (US 6,449,249 B1). Regarding claim 29, the reference discloses a telecommunications system inherently comprising a housing. The system is comprised of physical components that would need to be provided in a housing to enclose and protect the components. The system also comprises a backplane 425 which would be disposed within the housing and is adapted to receive a plurality of cards for 401, 402, 403, 410, 411 providing services to a plurality of subscribers and wherein the housing

Art Unit: 2841

may receive a module (one of 430, 435, 440, 445, 450) to communicatively couple to one or more of the plurality of cards in the housing to add redundancy to the telecommunications system. It is again noted that it has been held that the recitation that an element is "adapted to" or "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Regarding claim 30 the module may engage a rear panel of the housing. Any panel may be considered a rear panel the word "rear" is a relative directional term.

Regarding claim 31, the module (one of 435, 440, 450) includes a relay/switch that selectively routes signals between a redundant card 401 and the inputs and outputs associated with a primary card 402 when the primary card fails.

Regarding claim 32, the plurality of cards includes a plurality of paired primary and secondary cards, (first primary/secondary pair 402, 401 and second primary/secondary pair 411, 410) and wherein the relay/switch redirects signals between a redundant primary card and a secondary card associated with a failed primary card.

Regarding claim 33, the reference discloses a telecommunications system inherently comprising a housing. The system also comprises a backplane 425 which would be disposed in the housing and is adapted to receive a plurality of electronic modules 401, 402, 403, 410, 411 each electronic module associated with inputs and outputs for providing services to a plurality of subscribers, wherein the housing is adapted to receive an adaptation module (one of 430, 435, 440, 445, 450) to selectively

communicatively couple to the plurality of electronic modules in the housing and wherein the adaptation module would be inherently received in the housing and, one of the electronic modules is designated as a back-up electronic module 401 or 410 and wherein the adaptation module selectively routes signals between the back-up electronic module and the inputs and outputs associated with a primary electronic module (one of 402, 403, 411) upon failure of the primary electronic module.

Regarding claim 34, the adaptation module (one of 435, 440, 450) comprises a switch.

Regarding claim 35, the plurality of electronic modules is associated with a second plurality of electronic modules (one of 430, 435, 440, 445, 450 not including the module specified as the above noted adaptation module) to provide inputs and outputs for the plurality of electronic modules.

Regarding claim 36, the reference teaches providing redundancy in a telecommunication system, the method comprising inherently providing a housing. The housing having a plurality of electronics modules 402, 403, 411 operating in a non-redundant configuration, attaching a redundancy module comprising 410, 401, where 401 is to selectively communicate with the plurality of electronic modules 402, 403 and, designating one of the modules 410 as a redundant electronic module to back-up the remaining electronic modules 411 in a redundant configuration.

Regarding claim 38, the reference discloses a telecommunications system inherently comprising a housing. The system also comprises a backplane 425 inherently disposed within the housing and adapted to receive a plurality of cards 402,

Art Unit: 2841


403 for providing services to a plurality of subscribers and wherein the housing is adapted to receive a self-contained module 401 to plug into the housing to add N+1 redundancy to the telecommunications equipment.

Allowable Subject Matter

8. Claims 12-15, 20-21, 25-28 are allowed.
9. Claims 7-8, 10-11, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (703) 308-0303. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (703) 308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

PTVu 
Patent Examiner
January 13, 2003